



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,664	11/28/2000	Dan Shimizu	723-969	5289

7590 12/17/2002

NIXON & VANDERHYE P.C.  
8th Floor  
1100 North Glebe Road  
Arlington, VA 22201-4714

EXAMINER

JONES, SCOTT E

ART UNIT

PAPER NUMBER

3713

DATE MAILED: 12/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

He

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/722,664	SHIMIZU ET AL.	
	Examiner	Art Unit	
	Scott E. Jones	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-12, 14-18 and 21-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-12, 14-18 and 21-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 27 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to the amendment filed on September 27, 2002 in which applicant cancels claims 1, 13, 19, and 20, amends claims 2-4, 6, 7, 14, 16-18, 21, and 23, adds new claims 24-39, and responds to the claim rejections. In addition, applicant submits corrections to the drawings, and provides an IDS for further consideration of the prior art.

### ***Drawings***

2. The corrected or substitute drawings were received on September 27, 2002. These drawings are acceptable.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 154 in Figure 4, as described on Page 15, line 3 of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claim 39 is objected to because of the following informalities: In claim 39, line 3, "game" is misspelled "fame". Correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3713

6. Claims 24-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishiumi et al. (U.S. 6,200,253).

Nishiumi et al. discloses a controller control circuit (17) that provides for receiving and transmitting data in a bit-serial fashion between the bus control circuit (12) and the game controller connections (181-184). Furthermore, control circuit (17) is comprised of RAM (174) and input/output buffers (172 and 173), which is used to communicate game controller input/output data to the game system (Figures 2, 5, 6, 13, Column 4, line 40-Column 5, line 2).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-7, 14-18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott-Jackson et al. (U.S. 5,714,981) in view of Nishiumi et al. (U.S. 6,200,253).

Scott-Jackson et al. discloses a gameport communication apparatus and method for use with a computer game system which enables signals to be communicated to/from the computer game system to an external device (controller) through a gameport (expansion box (624)) thereby reducing the burden on the game program executing system.

Scott-Jackson et al. discloses:

Regarding Claims 14, and 21:

- a game program executing system (202) executing a game program (Column 1, lines 1-8, 34-36, and Figure 6);

- one or more controllers (606 a-d) supplying user inputs to the game program executing system (Abstract, Figure 6, Column 2, lines 9-19, 33-41, and Column 20, lines 18-53);
- an interface (624) between the controllers and the game program executing system, the interface system being programmable to periodically poll the controller without involvement of the game program executing system (Column 2, lines 22-32, Column 10, lines 1-48, Column 13, lines 29-59, and Figures 6 and 9).
- a double buffer (temporary buffer and latch buffer) for storing data transferred between the game program executing system and the controller (Column 15, line 54-Column 16, line 17, and Figures 12-13).

Regarding Claim 2:

- the interface is programmable to poll the controllers a predetermined number of times between each vertical blanking interval (Abstract, Column 20, lines 39-42, and Column 20, line 64-Column 21, line 29).

Regarding Claim 3:

- the interface is programmable to poll the controllers based on a number of video lines interval (Abstract, Column 20, lines 39-42, and Column 20, line 64-Column 21, line 29).

Regarding Claims 4-7:

- the interface is programmable to polls the status of the controllers. Scott-Jackson's device identifies the activation of one or more buttons or can identify the type of controller being used. (Column 2, lines 42-62, and Column 13, line 60-Column 14, line 12).

Regarding Claims 16 and 23:

- the interface system has a modem to transfer data between the game program executing system and the controller (Column 3, line 51-Column 4, line 5).

Regarding Claim 18:

- the controller including read/write memory (Figure 6, and Column 9, line 42-Column 11, line 11).

Regarding Claim 21:

- a game program executing system (202) executing a game program (Column 1, lines 1-8, 34-36, and Figure 6);
- a controller (606 a-d) supplying user inputs to the game program executing system (Abstract, Figure 6, Column 2, lines 9-19, 33-41, and Column 20, lines 18-53); and
- an interface (624) interfacing between the game program executing system and the controller, the interface including communication circuitry operable in a first mode in which data of a fixed size is communicated between the game program executing system and the controller and in a second mode in which data of variable size is communicated between the game program executing system and the controller (Column 17, lines 12-34, Column 19, lines 33-55, and Figures 6, 8A and 9). Each read data cycle (806) transfers 16 bits of data over each line. However, the system can be configured to more or fewer bits of data for each cycle (806) making the cycle longer or shorter in duration; and
- a communication memory for storing the variable size data (Column 17, lines 12-34, Column 19, lines 33-55, and Figures 6, 8A and 9).

Although Scott-Jackson et al. discloses the gameport (interface) can be used with essentially any type of data acquisition device (joystick, gamepad, etc.) it does not explicitly disclose:

Regarding Claim 14:

- a communication RAM for storing data transferred between the game program executing system and the controllers.

Regarding Claims 15 and 22:

- selectors for selectively connecting the controllers to either the double buffer or the communication RAM.

Regarding Claim 17:

- a controller having a vibration circuit for vibrating a housing of a controller.

Nishiumi et al. (U.S. 6,200,253 B1), like Scott-Jackson et al., teaches of a computer game system and is therefore analogous art. Furthermore, Nishiumi et al. teaches:

Regarding Claim 14:

- a communication RAM (174) for storing data transferred between the game program executing system and the controllers (Figures 2, 5, 6, 13, Column 4, line 40-Column 5, line 2).

Regarding Claim 14:

- a communication RAM for storing data transferred between the game program executing system and the controllers (Figures 2, 5, 6, 13, Column 4, line 40-Column 5, line 2).

Regarding Claims 15 and 22:

- selectors for selectively connecting the controllers to either the double buffer or the communication RAM (Figures 2, 5, 6, 13, Column 4, line 40-Column 5, line 2).

Regarding Claim 17:

- a controller pack, which is attached to a game controller that generates a vibration using electric power, and a driver circuit that applies the electric power to the vibration source in response to a command signal from the game machine (Figure 1, 2, and Column 1, line 43-Column 2, line 20).

It would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention, to utilize Nishiumi's vibration controller pack on one of Scott-Jackson's game controllers. Doing so enables a player to enjoy a game having a controller providing signals that simulate "boating, fishing, and catching" realistically on a home video game machine and .

9. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott-Jackson et al. (U.S. 5,714,981) in view of Nishiumi et al. (U.S. 6,200,253) and further in view of Takeda et al. (U.S. 6,022,274).

Scott-Jackson et al. in view of Nishiumi et al. teaches that as discussed above regarding Claims 2-7, 14-18, and 21-23. However, the combination of Scott-Jackson et al. in view of Nishiumi et al. seems to lack teaching of a game system wherein the status of the controllers includes various types of error data (Claims 8-12).

However, Takeda et al., like Scott-Jackson et al. in view of Nishiumi et al. teaches of a computer game system and is therefore analogous art. Furthermore, Takeda et al. discloses controller status input/output bits regarding data collision error, frame error, overrun error, no response error between the game controllers and the game system (Claims 8-12).

It would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention, to incorporate the game controller error detection functions in the peripheral processing subsystem external to the game microprocessor and coprocessor which



Art Unit: 3713

executes commands for handling player controller input/output of Takeda in Scott-Jackson in view of Nishiumi. One would be motivated to do so because this lessens the processing burden on the graphics processing subsystem allowing for a high performance game system.

***Response to Arguments***

10. Applicant's arguments with respect to claims 2-12, 14-18, and 21-23 have been considered but are moot in view of the new ground(s) of rejection.
11. The rejections to claims 4-12, 16, and 23 under 35 U.S.C. 112, second paragraph are withdrawn because applicant has amended the claims to overcome the claim rejections.
12. The objections to the specification are withdrawn because applicant has amended the specification to overcome the objections.

***Conclusion***

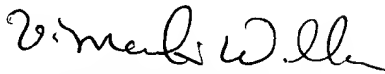
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott E. Jones whose telephone number is (703) 308-7133. The examiner can normally be reached on Monday - Friday, 8:30 A.M. - 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (703) 308-4119. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

SEJ

sej  
December 15, 2002

  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700